



# Exploring for Deep-sea Corals and Sponges in Gulf of the Farallones National Marine Sanctuary



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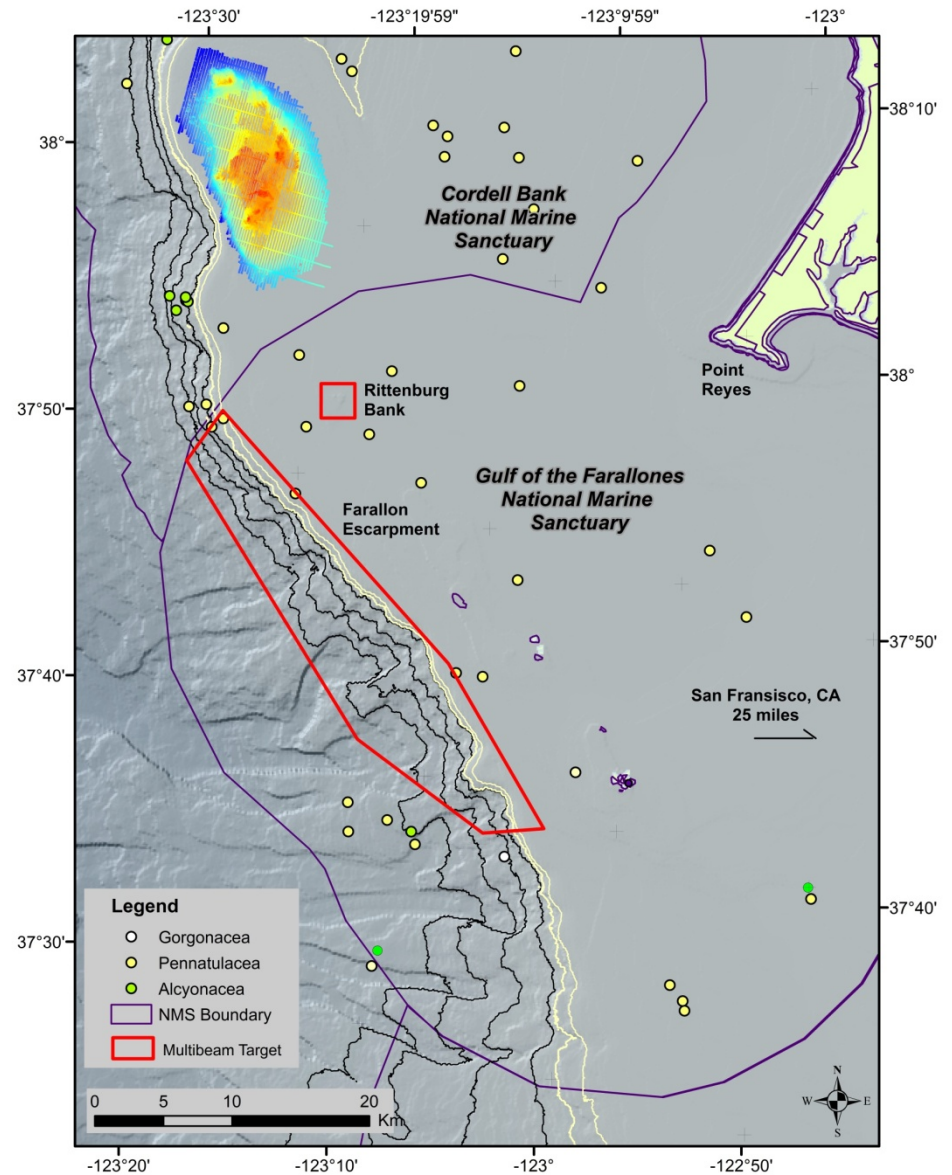
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*<sup>3</sup>United States Geological Survey*

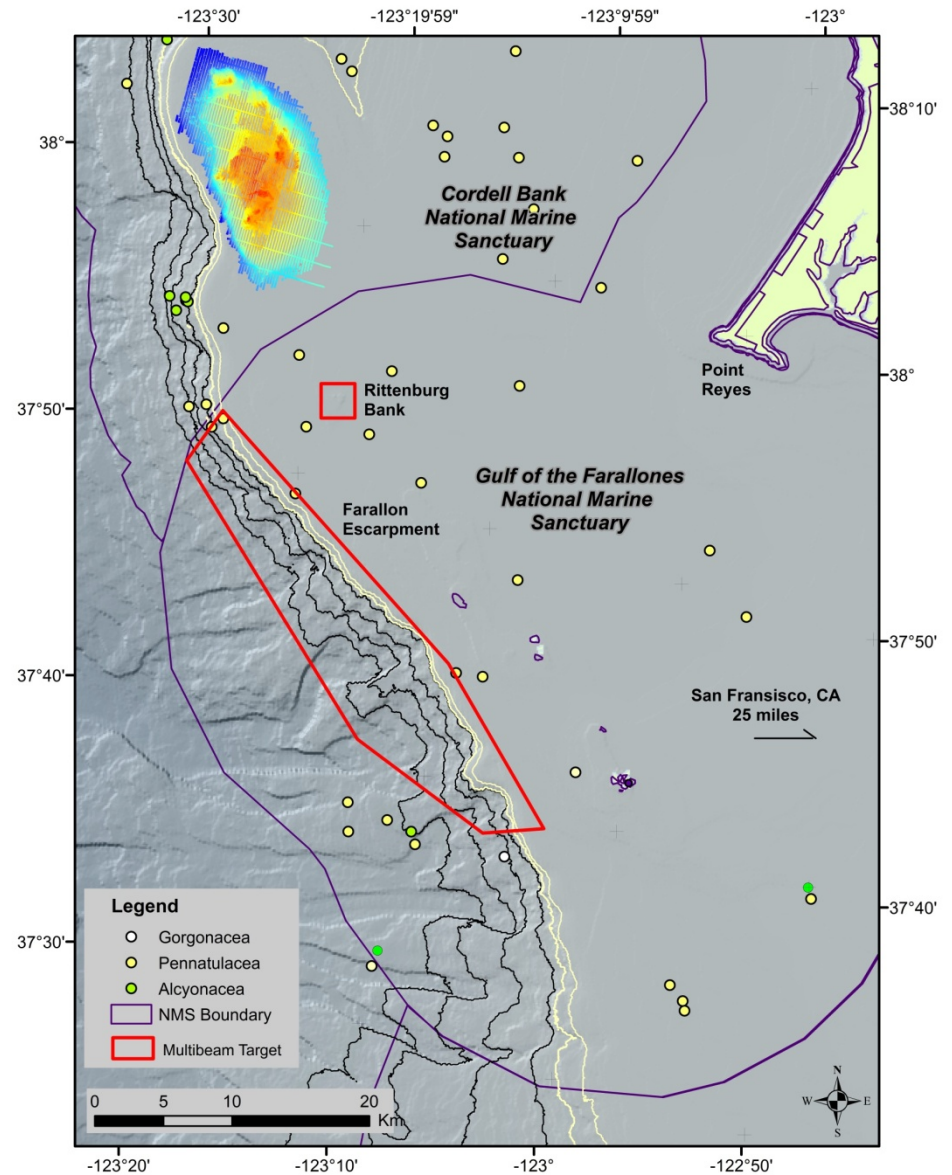


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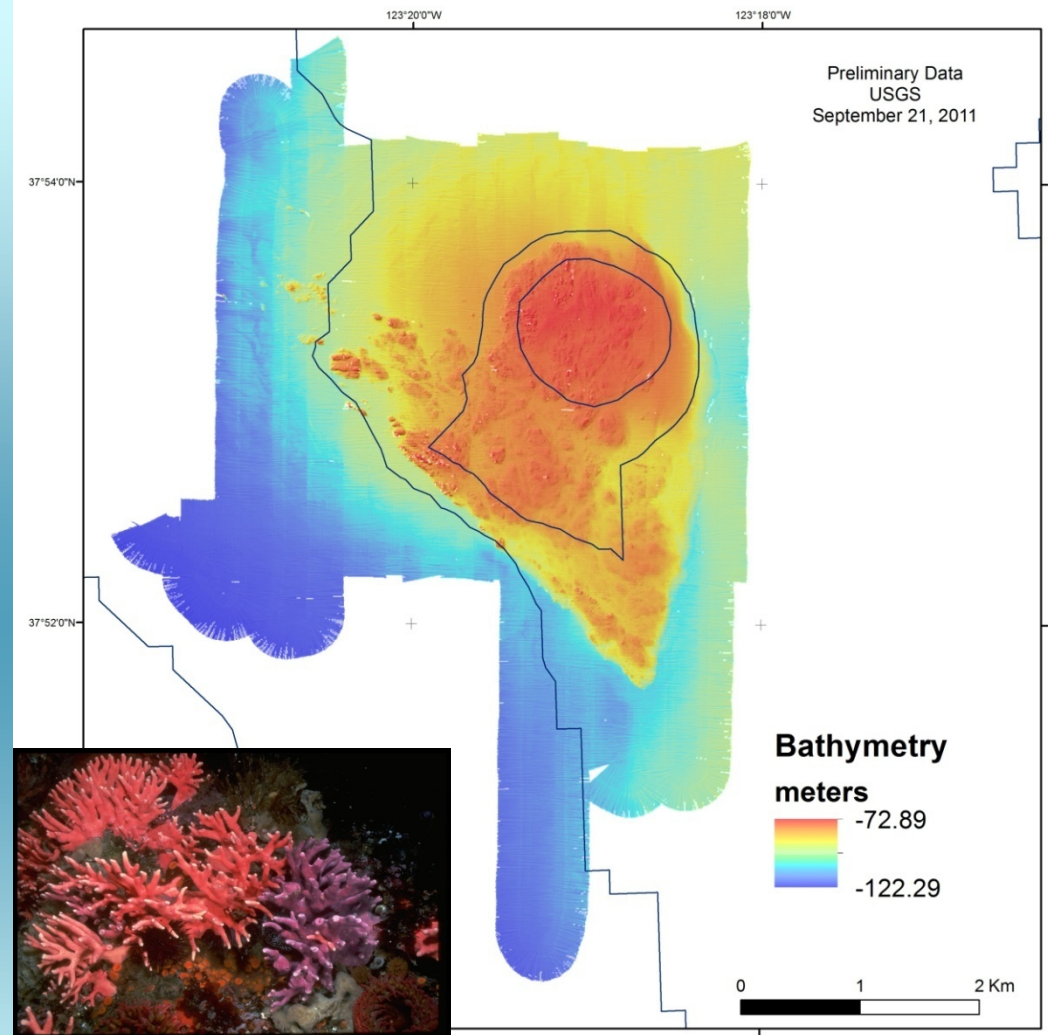
- Deep-sea corals and sponges are expected to occur in GFNMS because colonies occur both north and south, in similar habitats
- Seafloor topography suggest many steep and/or hard bottom features between 50-1000 m



- Color dots are locations where corals, sponges and sea pens have been collected or observed through NMFS trawl surveys.
- Red boxes indicate the areas targeted for multibeam mapping during the September 2011 cruise on board R/V *FULMAR*.

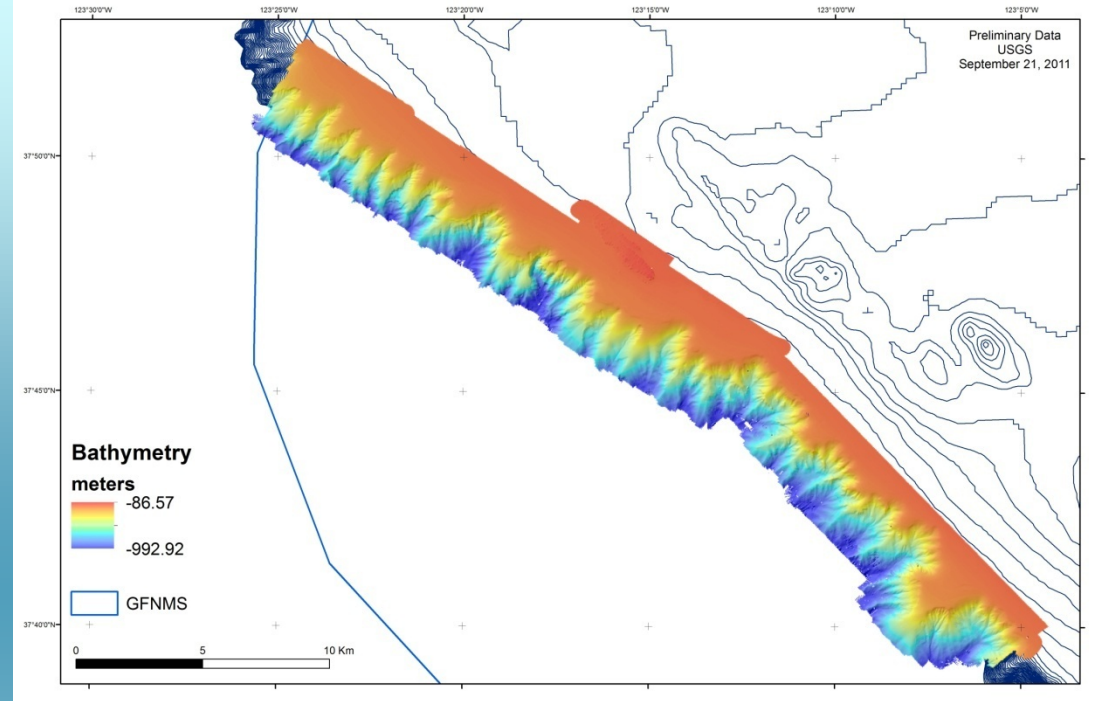


- Rittenburg Bank depth ranges from 50-150 m
- Preliminary multibeam data from Rittenburg Bank, indicate habitat that can support *Stylaster* spp., a fragile hydrocoral likely to occur within this depth range.





- Farallon Escarpment depth ranges from 150-1000 m
- Preliminary multibeam data from the Escarpment indicate habitat likely to support deep-sea corals such as bubblegum and primnoid corals.



**Bubblegum Coral**  
(*Paragorgia* sp.)



**Primnoid Coral**  
(*Plumarella longispina*)



- High resolution maps of depth, slope, and substrate hardness are expected by March 2012. These will be used to target visual surveys in the fall of 2012, using an ROV and/or AUV in collaboration with NMFS.
- 3-D “fly-through” is expected by March of 2012.
- Exploratory and characterization cruises are planned for September-October 2012. Video, still images, and specimen collection are anticipated during these cruises.

